STATE OF MARYLAND

DHMH

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August 26, 2011

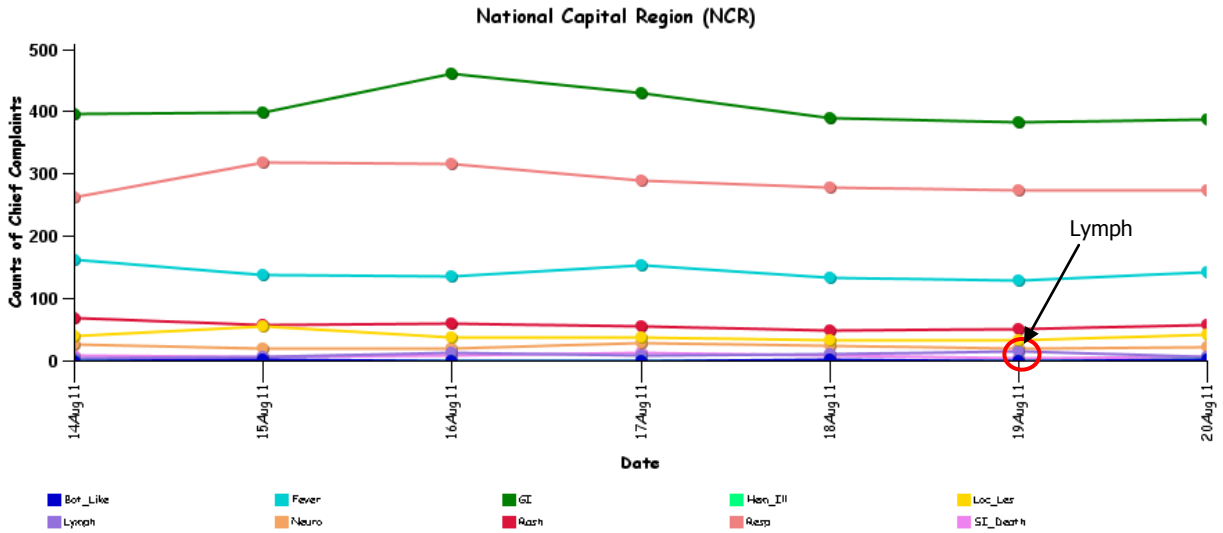
Public Health & Emergency Preparedness Bulletin: # 2011:33
Reporting for the week ending 08/20/11 (MMWR Week #33)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

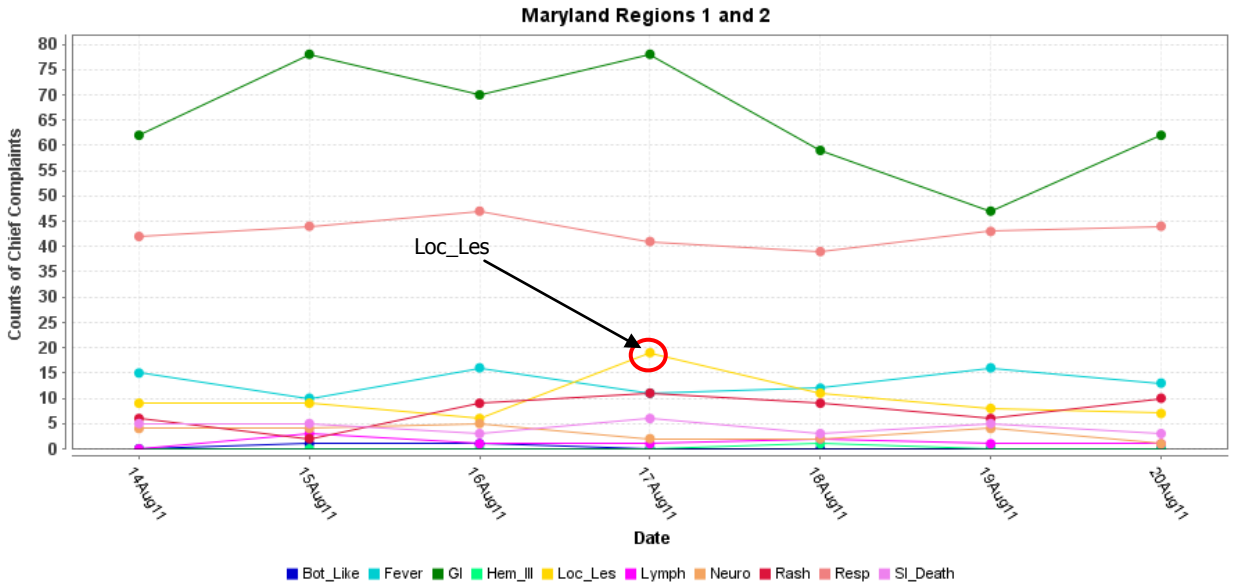
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

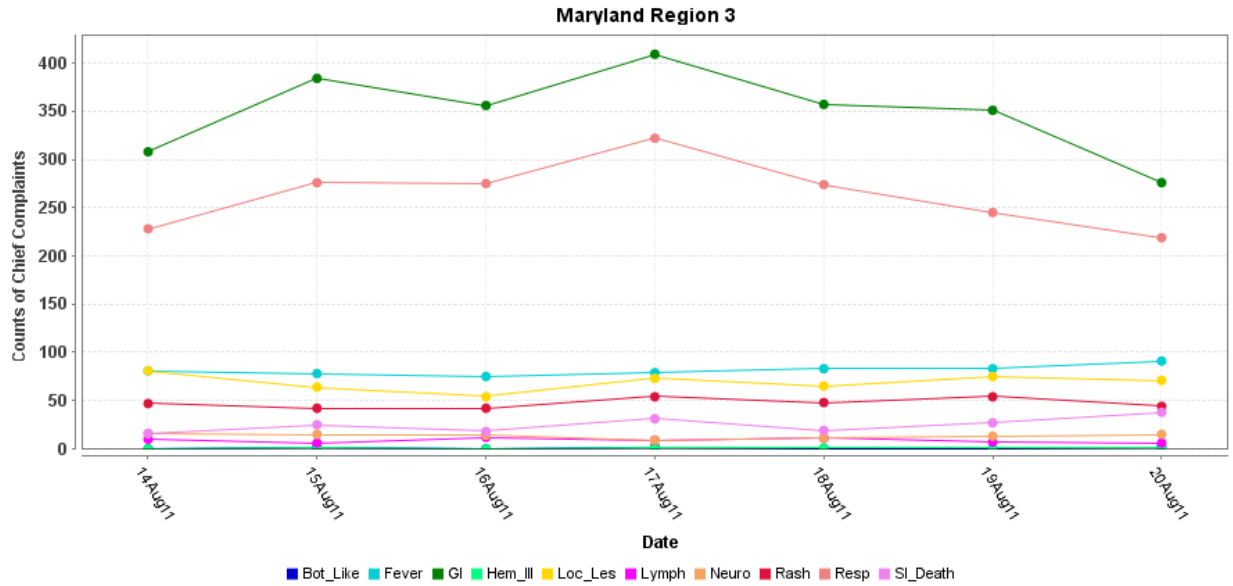


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

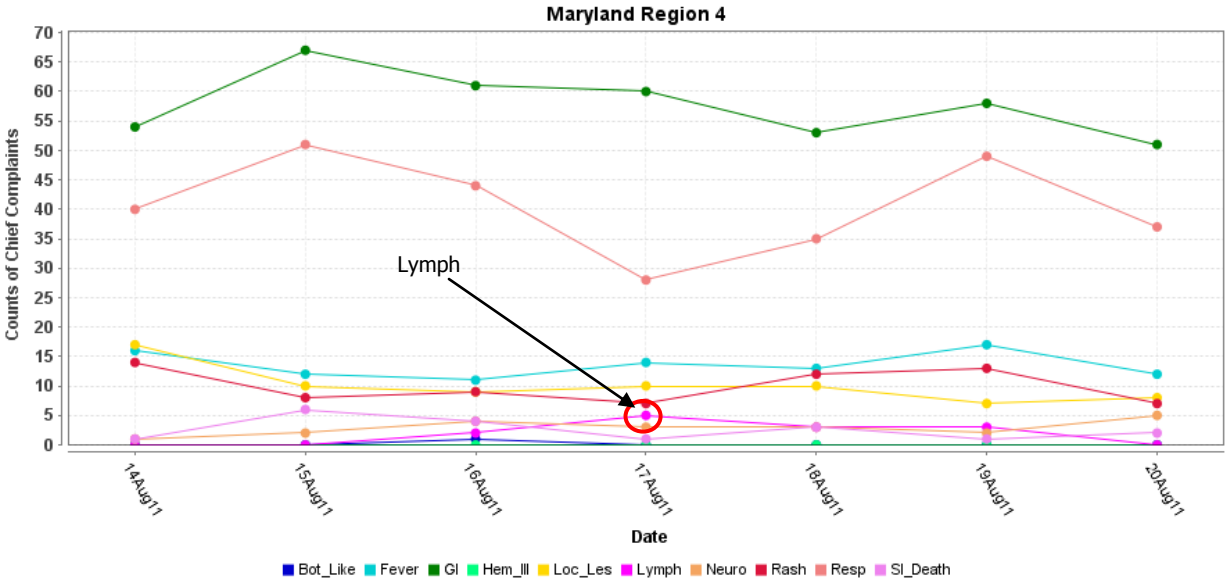
MARYLAND ESSENCE:



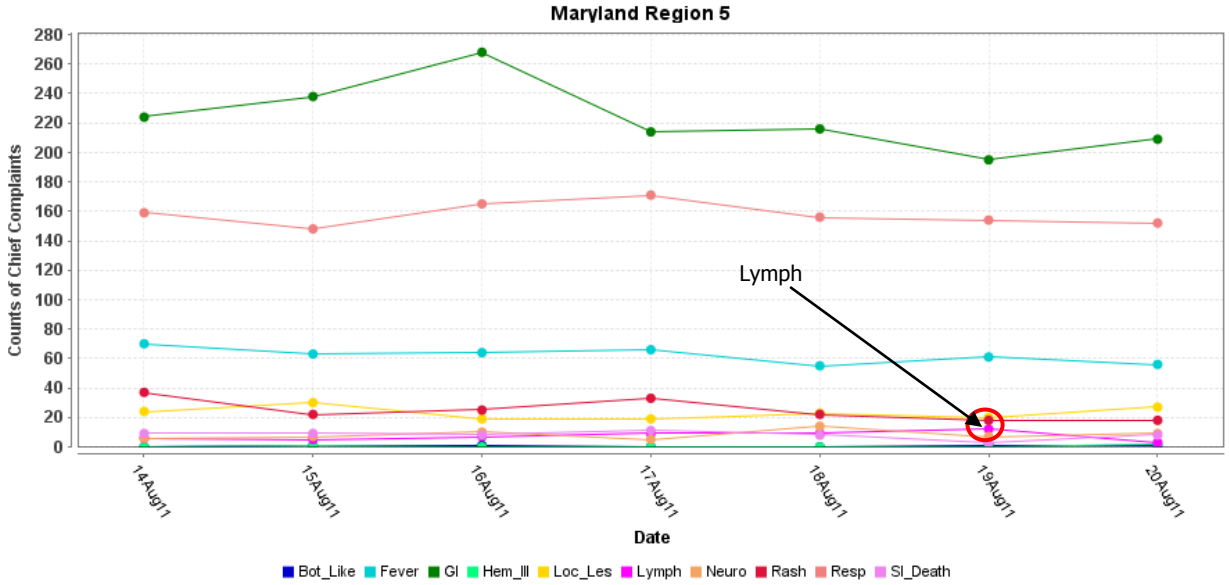
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



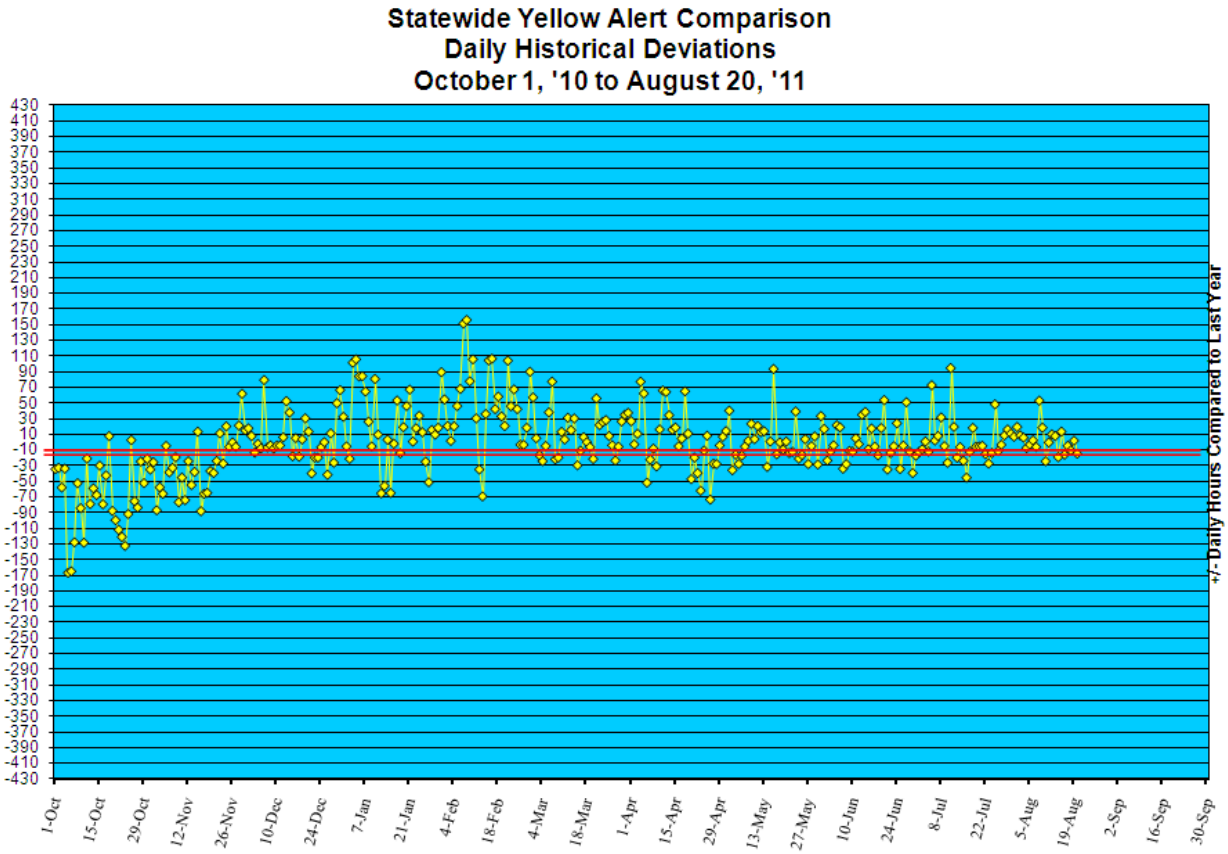
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in July 2011 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (August 14 – August 20, 2011):	25	0
Prior week (August 7 – August 13, 2011):	11	0
Week#33, 2010 (August 15 – August 21, 2010):	13	0

0 outbreaks were reported to DHMH during MMWR week 33 (August 14 – August 20, 2011).

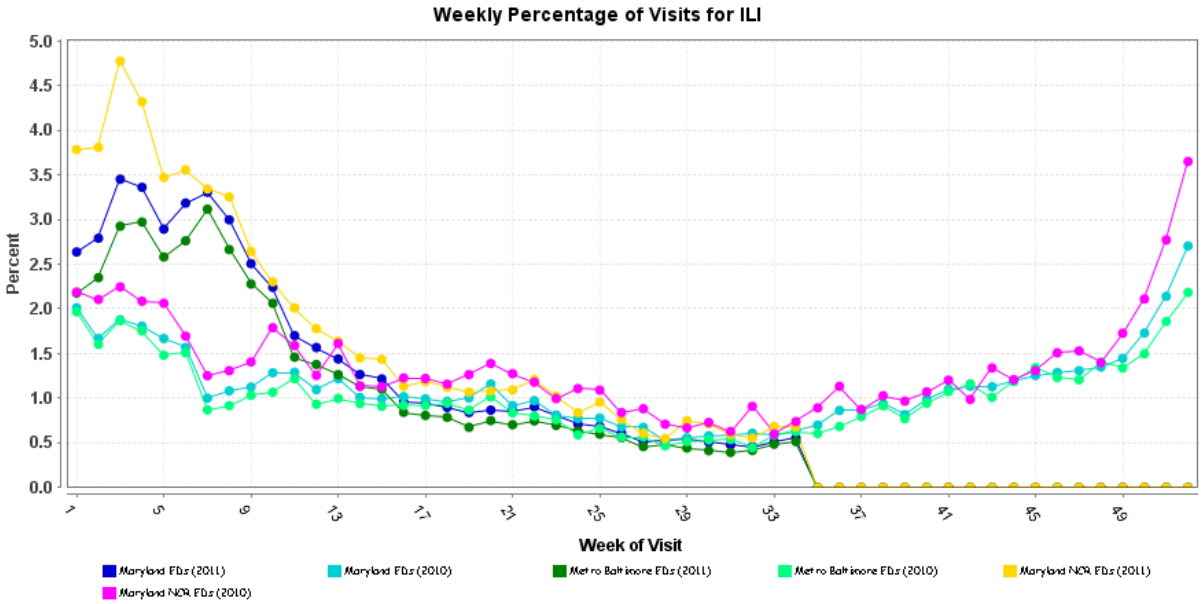
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

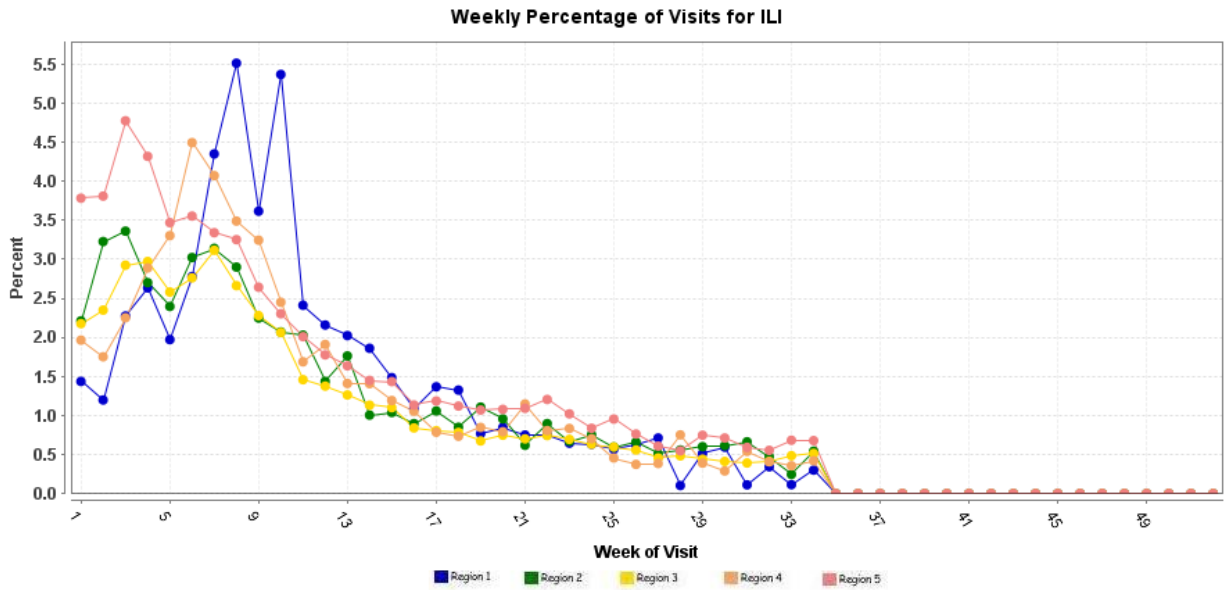
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



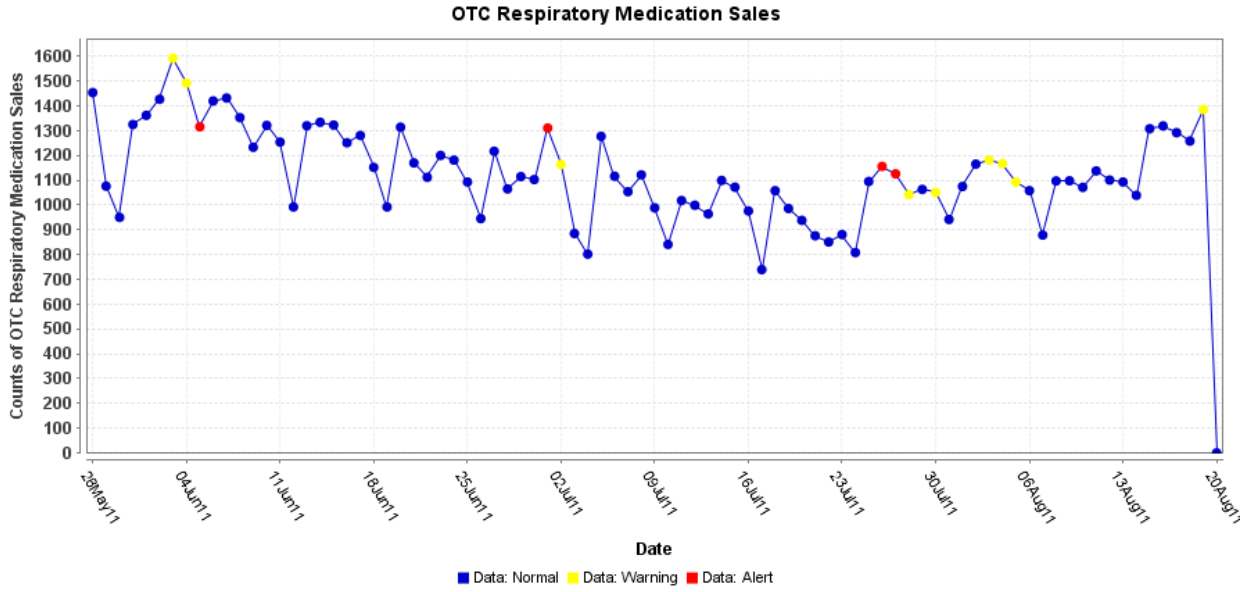
* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

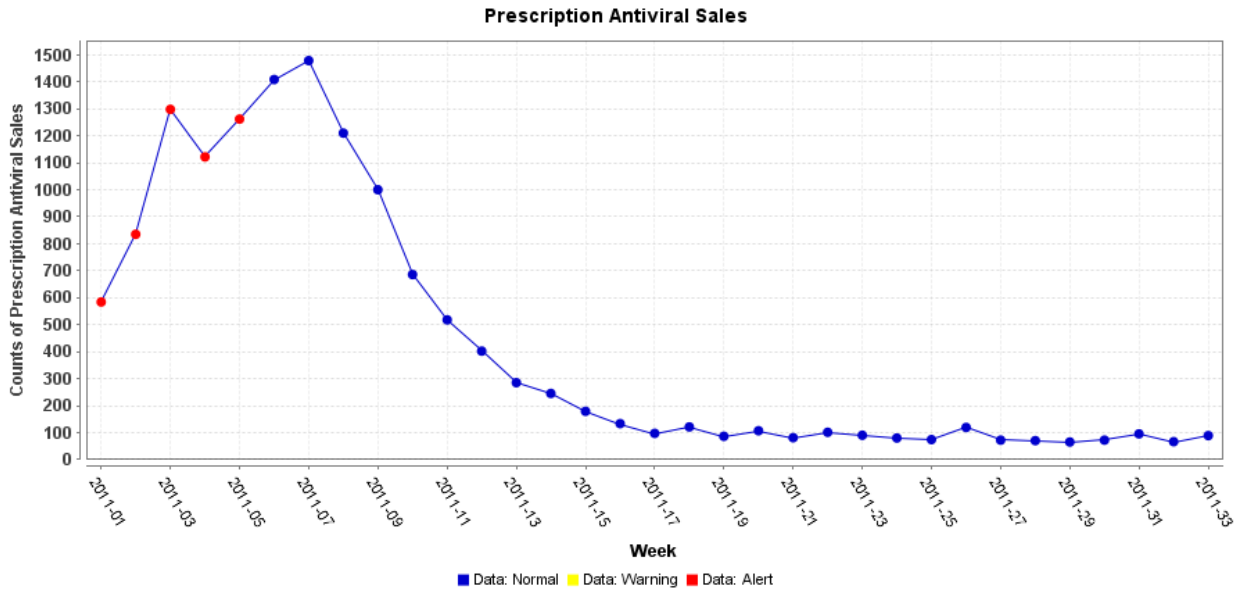
OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PRESCRIPTION ANTIVIRAL SALES:

Graph shows the weekly number of prescription antiviral sales in Maryland.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of August 9, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 565, of which 331 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (CAMBODIA): 19 August 2011, The Ministry of Health (MoH) of the Kingdom of Cambodia has announced a confirmed case of human infection with avian influenza A (H5N1) virus. The case was a 6-year-old female from Taing Thleung Village, Mepring Commune, Cheung Prey District, Kampong Cham Province. She developed symptoms on 7 Aug 2011, was initially treated by local practitioners with no effect, and was later admitted to Kantha Bopha Children's Hospital in Phnom Penh on 12 Aug 2011. She died on 14 Aug 2011, 2 days after admission. There have been reports of poultry die offs in her village, and the case is reported to have had exposure to sick poultry. This female is the 18th person in Cambodia to become infected with the H5N1 virus and the 16th to die from complications of the disease. All 8 cases of H5N1 infection in humans in Cambodia this year [2011] have been fatal. The National and local Rapid Response Teams (RRT) are conducting an outbreak investigation and response following the national protocol. Health education messages are ongoing in the community. To date, none of the human contacts have tested positive for A(H5N1).

NATIONAL DISEASE REPORTS

AMEBIC MENINGIOENCEPHALITIS (USA): 20 August 2011, The Centers for Disease Control and Prevention (CDC) is asking Virginia for help sampling state waterways as it attempts to develop a test for detecting microscopic amoebas that have caused 3 U.S. deaths this year. This month, a 9-year-old Henrico County boy died after being exposed to *Naegleria fowleri*, which swims up nasal passages and burrows into the brain, causing a fatal infection known as primary amoebic meningoencephalitis. The patient

had visited several bodies of water during a Richmond fishing camp the previous week. A Louisiana man and a Florida girl also died after exposure to the amoeba this summer. In total, more than 120 people have died of the waterborne amoeba since it was identified in the early 1960s, the CDC reports. The CDC knows little about the free-living amoebas, which can be found in bodies of freshwater around the country, said Michael Beach, the federal agency's associate director for healthy water. "It's a terrible disease that we would like to know more about and be able to tell the public more about from a prevention standpoint," he said. "We are trying to learn more, but it's a tough one because it's such a rare occurrence." He said the Atlanta-based agency wants to know why millions of people come in contact with the amoebas every year by swimming in their local ponds and lakes, but only a few die. "That's the million-dollar question," he said. "We have no idea." He said scientists want to know if there is something anatomically different about children who were infected -- the average age of victims is 12 -- or if there are differences in the amoebas themselves. They want to know if a person is more likely to get infected if there is a higher quantity of the amoebas. And they wonder if being infected by an amoeba is "just a very rare event and the person happens to be in the wrong place at the wrong time and one amoeba is floating by. Our take on this is the 1st thing to do is have a good test," he said. "Then, you can start to ask, 'With all these other things changing, how does that affect Naegleria?'" He said the test being developed would use an antibody that would act as a magnet to pull the amoeba out of a volume of water. He has talked with Virginia's Department of Health about pulling samples from some of its waterways that could be used to test the test, Beach said. He said it could happen as soon as this summer or possibly next summer. "We don't have the staffing or resources to be able to do that remotely," Beach said. He said the CDC does not recommend that states sample waterways after an amoebic meningoencephalitis case because the current tests are so unreliable. Virginia has not sampled any waterways in the aftermath of Christian's death, nor has it closed any ponds or lakes. "We're not going to be able to pinpoint where he contracted the amoeba," said Dr. Keri Hall, the state epidemiologist for the Department of Health. She said the patient had visited multiple bodies of water, including the James River. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

WATERBORNE ILLNESS, SUMMER CAMP (UT): 16 August 2011, Health officials in the Ogden, Utah, area put out a warning after a group of young girls at a campground were apparently sickened earlier in August 2011 by bacteria in the water. Authorities say water at the Shawnee and Ben Lomond campgrounds in Weber County's North Fork Canyon tested positive for chloroform and *E. coli* bacteria. They say the bacteria is likely why 11 members of girls' camping trip got sick after staying at Shawnee Campground between 2-5 Aug 2011. Officials are asking campers to bring their own supply of water to use for drinking, cooking, and personal hygiene. Scientists from the Weber-Morgan Health Department say they are working to disinfect the water supply and will be testing the water until the bacteria are gone. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI 0157 (OREGON): 17 August 2011, Oregon scientists confirmed today, 17 Aug 2011, that deer droppings from Jaquith Strawberry Farm contained the same strain of *E. coli* [O157:H7] that sickened people in Multnomah, Washington Clackamas, Yamhill, and Clatsop counties. Lab testing confirmed deer as the source of the outbreak," said William Keene, senior epidemiologist at Oregon Public Health. Scientists picked up environmental samples from fields at Jaquith Strawberry Farm in rural Washington County and 10 tested positive for *E. coli O157:H7*. Of those, 6 matched the strain that sickened 15 people in Oregon, including a woman who died. The other 4 were separate strains of *E. coli O157:H7*. Keene said the outbreak strain turned up in samples from fields in 3 separate locations. "It could be a single deer that conceivably traveled from one field to another," Keene said. But he said the positive tests probably indicate that several or perhaps many of the deer around Jaquith's property carry O157:H7. But they don't know for sure because they've not done much testing. A total of 7 people were hospitalized in the outbreak and 3 suffered kidney failure, Keene said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

SALMONELLOSIS SEROTYPE ENTERITIDIS PT14B (UK): 16 August 2011, A multi-agency investigation is continuing after a link has been established between a batch of imported eggs and an outbreak of *Salmonella [enterica serotype] Enteritidis* Phage Type (PT) 14b infection in England and Wales. 221 cases of *S. Enteritidis* PT 14b infection have been reported since the beginning of 2011, the majority of cases being in North West England (104 cases), the West Midlands (36 cases) and the East Midlands (26 cases). Dr Joe Kearney, a Health Protection Agency (HPA) director who chairs the outbreak control team (OCT), said: "A strain of *S._Enteritidis* PT 14b that is indistinguishable from samples taken from the human cases was isolated from a small number of eggs that had the same batch number. These eggs had come from a specific shed on a single farm in Spain. The Food Standards Agency (FSA) alerted the Spanish authorities, and measures were taken to eliminate the risk of contamination from this source, including the culling of a flock of hens, the cleaning of the shed and the heat treatment of eggs to kill salmonella. No eggs with the implicated batch number have been imported to this country since the end of June 2011. The FSA alerted Environmental Health Officers throughout England and Wales to the situation, and checks were made and continue to be made on the distribution chain. Whenever eggs with the implicated batch number are found in the system, these are removed from sale. In the meantime, our investigations are continuing," said Dr Kearney. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

FOODBORNE ILLNESS (SPAIN): 3 August 2011, The Andalusian Health Ministry, through the Granada Provincial Delegation, has pointed to "poor maintenance" of food as a possible cause of food poisoning that affected 76 young Italians this Sunday [14 Aug 2011], members of a group attending the World Youth Day (WYD), which was housed in the sports complex located in Otura municipality of Granada. Results of epidemiological analysis performed on the food [samples] are awaited. According to information from sources at the Granada Health Delegation given to Europa Press, although the exact causes of the incident are unknown, the 1st hypothesis suggests that the cause was a "poor maintenance" of a tuna, mayonnaise, and egg sandwich the affected individuals had consumed. In addition, the same sources stated that they distributed the catered food to the 300 young people located in the

sports complex, of which a group of 76 who spent the day at the beach began with moderate symptoms of food poisoning, after eating tuna sandwiches. Also, the same sources explained that the findings led to the health services taking samples of food for analysis, the results of which are pending. Similarly, they have ruled that the cause of the poisoning was in the general Otura community as there have not been any local residents affected by this outbreak. Meanwhile, according to municipal sources from the Otura City Council authorities are also considering the hypothesis that the victims suffered from the so-called "traveler's diarrhea," caused by an infection by a bacterium, virus or parasite, and that the mode of transmission of the disease "could have been" by ingesting contaminated food or beverages. They have also reported that those affected are in stable condition, resting, and receiving hydration. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX (CHINA): 16 August 2011, Another 2 cutaneous anthrax infections were reported in northeast Liaoning Province, bringing the total number of people who were hospitalized for the disease to 32, health authorities said Tuesday [16 Aug 2011]. The 2 cases were found Monday in Donggang City, more than 100 km [62 miles] away from the city where the disease was 1st reported, the Liaoning Provincial Health Department said in a statement. Health experts noted that all the cases originated from the same source. As of 8 p.m. Monday [15 Aug 2011], 4 cases have been confirmed while 28 others were still being investigated, according to the health department. An initial investigation by local health authorities showed that the patients contracted the disease after direct contact with diseased cattle. The government of Liaoning has since killed or disinfected more than 400 heads of cattle in the province and carried out a survey among over 20 000 people. Cutaneous anthrax is an infection of the skin caused by direct contact with infected animals or animal products. It is rarely fatal if treated. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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